Function Maintenance

Functions are composed of the keywords entered in the Keyword Editor. Before it is possible to define functions, the keywords must be successfully stowed (see the section Keyword Maintenance).

- Define Functions
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Define Functions

Use the Define Functions function and the Function Editor to specify functions and compose valid commands which can be accessed from a specific location.

To invoke the Function Editor

1. On the Processor Source Maintenance menu, enter Function Code **F** (Define Functions).
2. Press ENTER.
   The Function Editor screen is displayed.

The Function Editor displays all possible combinations of the keywords stowed in the Keyword Editor.

The screen below, shows the Function Editor with keywords used as examples in the Keyword Editor screen in the section Keyword Maintenance:

```
 09:45:53              ***** NATURAL SYSNCP UTILITY *****        2000-05-04
 User SAG                      - Function Editor -
 Edit Global Combinations    Name SAGTEST  Library SYSNCP    DBID 10   FNR 32

 Global
 I Ac   Action          Object          Addition        Global Local Any Loc
 - --   --------------- --------------- --------------- ------ ----- -------
        DELETE
        DELETE          DOCUMENT                                          Yes
        DELETE          FILE                                              Yes
        DISPLAY
        DISPLAY         DOCUMENT                                          Yes
        DISPLAY         FILE                                              Yes
        FILE
        FILE            DOCUMENT                                          Yes
        FILE            FILE                                              Yes
        INFORMATION                                             Yes
        INFORMATION     DOCUMENT
        INFORMATION     FILE
 Repos: _____ _____ _____ ------ ----- -------


 Command ===>
 Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
       Help  Cmd   Exit  Last  List  Flip        +     Top   Loc   Loc+  Canc
```

You have to validate each keyword combination that you want to designate as a valid function in your application. A keyword combination can be validated as a global function, local function or both. A global function can be invoked from anywhere in an application, whereas a local function can only be invoked from a specific location within an application.

Two fields in the upper left corner of this screen indicate the current validation mode (local or global) and the location for which keyword combinations can currently be validated. In the screen above, the text "Edit Global Combinations" indicates that global mode is active. If the local mode were active, the text "Edit Local Combinations" would appear here. In the screen above, the text "Global" appears below this text. This indicates that global validation can be performed for all of the combinations listed. In local mode, in this field the name of the location appears for which local validation can be performed (for example, "Local DISPLAY FILE").

The Function Editor contains the following columns:

Column	Explanation
I	Output field. The following values are output as a result of function editing. E Runtime action edited. D Referenced locations displayed. V Validation issued. R Validation removed.
Ac	Action to be taken. The following values can be entered: VG Validate as global function. VL Validate as local function. RG Remove validation as global function. RL Remove validation as local function. DL Display all functions which reference the specified function as a local function. EG Invoke the Runtime Action Editor for a global function (see Runtime Action Editor in the section Runtime Actions). EL Invoke the Runtime Action Editor for a local function (see Runtime Action Editor in the section Runtime Actions). +G Invoke global mode, so that you can maintain any global functions. +L Invoke local mode for the current line, so that you can maintain local functions for this line. IN Information about keywords in this line.
Action Object Addition	These three columns are used to display all possible combinations of currently defined keywords. The text which appears at the top of each keyword column is controlled by the fields "First Entry used as", "Second Entry used as" and "Third Entry used as" as specified in the processor header (see Keyword Runtime Options - Header 1 in the section Header Records).
Global	If the function has been defined as a global command, Yes appears in this field.
Local	If the function has been defined as a local command, Yes appears in this field for the current location (only displayed in local mode).
Any Loc	Any Location. If the function has been defined as a local command anywhere else within the processor, Yes appears in this field for any other location.

Editor Commands

In the command line of the Function Editor, you can enter the following commands:

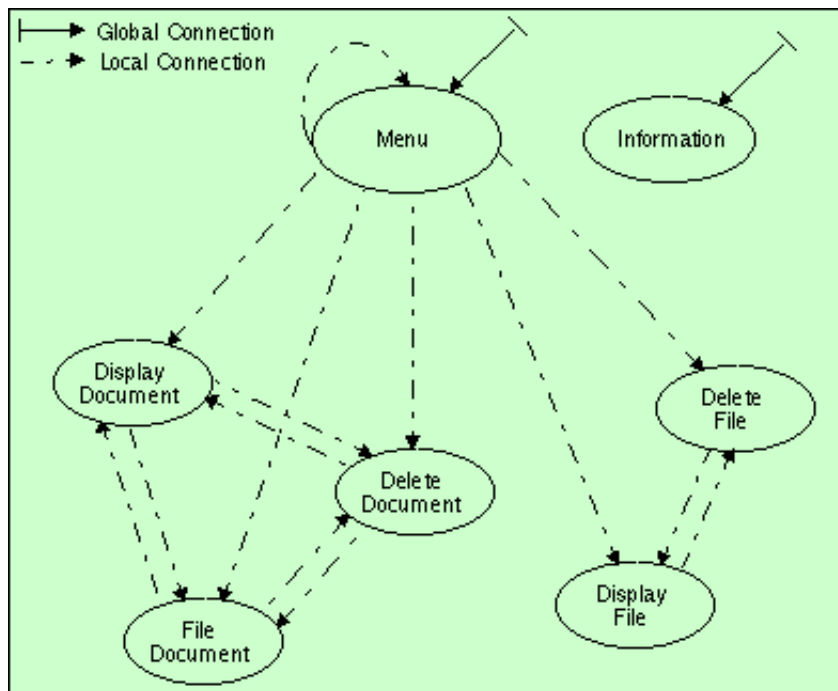| Command	Function
ANY ON	Enable the column Any Loc.
ANY OFF	Disable the column Any Loc (the column will be filled with question marks). This allows for faster scrolling in the Function Editor. Moreover, the third repositioning field is available. Also, processing-in-progress information windows will not be displayed.
FIELD	Display keyword-specific combinations.
GLOBAL	Activate global mode.
LOC	Position to next location group.
LOC+	Position forward by one location.
SINGLE ON	Display only single-word functions.
SINGLE OFF	Display all possible combinations.
TOP	Position to top of list.

Direct Command QUICK-EDIT

The direct command QUICK-EDIT enables you to quickly define local/global functions, as well as the corresponding runtime actions, by entering keywords or IKNs directly. This may be helpful for extremely large command processors. Note, however, that the location from which the command can be issued is not verified and navigation may not function correctly at runtime.

Local and Global Functions

To understand the concept of local and global functions, you have to picture each valid keyword combination as a location in your application (for example, a location called Display File). In the Function Editor, you specify the commands which can be issued from this location, as well as from which locations this location can be reached using the command DISPLAY FILE.

Local and Global Connections within a Sample Application:

In the sample application above, the Menu and Information locations are the only locations which have been designated as global. Thus, they can be accessed directly from all of the remaining locations in the application. All locations have been designated as local to the location Menu, except Information. The only way to get from the location Display File to Display Document is via Menu.

Procedure for Validating Functions

The Function Editor operates in two modes: global and local. From global mode you can validate global functions and from local mode you can validate global and local functions. Global mode is the default mode. You can determine whether the editor is in global or local mode by the output field above the **I** field in the editor. If the editor is in global mode, then Global is displayed. If the editor is in local mode, then the location for which local functions are to be validated is displayed. Below is a general procedure for validating global and local functions for an application.

▶ **To validate global and local functions**

1. With the Function Editor in global mode, enter **VG** (validate global) in the Ac field next to the corresponding action to validate all global functions.
   Press ENTER.
   The Runtime Action Definition screen appears.
2. Press PF3 to return to the Function Editor.
   Yes appears under the column heading Global beside the validated functions.
3. Enter **+L** in the Ac field for each global function validated in the previous step, to switch to local mode.
   Press ENTER.
4. Enter **VL** (validate local) in the Ac field for each function that is to serve as a location for this global function.
   Press ENTER.
   The Runtime Action Definition screen appears.
5. Press PF3 to return to the Function Editor.
   Yes appears under the column heading Local beside the validated functions.
6. To validate local functions for a **local** location:
   Enter **+L** (invoke local mode) in the Ac field for each location validated in the previous step, to validate all local functions which are to be used from this location.
   Press ENTER.
7. Enter **VL** (validate local) in the Ac field for each function that is to serve as a local function for the current location.
8. Press PF3 to return to the Function Editor.
   Yes appears under the column heading Local beside the validated functions.

Note:
If in the command processor header (Processor Header Maintenance 3) the field Invoke Action Editor is set to Y, in addition, the window Runtime Action Definition (see Runtime Action Editor in the section Runtime Actions) is displayed for each action.